# PD6110 Integrating Vendor Models and Streamlining Equipment Creation for AutoCAD Plant 3D

Jess Neal – Application Engineer, ALL CAD
Shale Robison – President, ALL CAD

This class will cover the use of Inventor software tools for the simplification of both native and non-native vendor equipment models in order to minimize file sizes in large process-facility Building Information Modeling (BIM) projects. We will also discuss the pros and cons of using the BIM Exchange app inside Inventor software to export models for use in AutoCAD Plant 3D software.

PD6928
## Learning Objectives

At the end of this class, you will be able to:

- Understand concepts for simplifying native and non-native models in Inventor software

- Learn how to add nozzles and manufacturing information to models using BIM Exchange in Inventor software

- Learn how to convert equipment and add nozzles inside AutoCAD Plant 3D software

- Learn how to effectively use Autodesk tools to minimize file size and optimize performance for large-scale process manufacturing projects

## About the Speakers

*Jess Neal has over 17 years of experience as a designer and drafter. He has experience with various CAD platforms, including most AutoCAD software-based products. After dabbling in various 3D mechanical solid-modeling packages, his tool of choice is now Inventor software. He has extensive strengths in the areas of 3D modeling, fabrication practices, and structural detailing. In his off time he enjoys virtually designing projects on the computer and then building the projects in his shop. His projects have varied from small-scale RC vehicles and Jeep bumpers to large-scale projects like circle track race cars and off-road camping trailers.*

jneal@allcadnw.com

*Shale is a CAD junkie turned tech guru with extensive multi-discipline and multi-platform experience on large projects. His passion is to minimize duplication of digital data, facilitate efficient integration of technologies, and complete projects successfully. His career started out using a K&E Leroy lettering set and has culminated in business ownership at ALL CAD, a consulting firm for 3D technology integration and project staffing.*

srobison@allcadnw.com

## Understand concepts for simplifying native and non-native models in Inventor software

- **Simplify vendor models**
  - Remove internal voids
  - Single composite
- **Simple shapes**
  - Envelope size
  - No small detail

## Learn how to add nozzles and manufacturing information to models using BIM Exchange in Inventor software

- **BIM Exchange environment**
  - Add nozzles
  - Add manufacturer info
- **Export Building Components**
  - Part vs Assembly
  - RFA vs ADSK

## Learn how to convert equipment and add nozzles inside AutoCAD Plant 3D software

- **Import ADSK Model**
- **Convert to Plant 3D Equipment**
- **Add nozzles**
- 

## Learn how to effectively use Autodesk tools to minimize file size and optimize performance for large-scale process manufacturing projects

- **View large data sets using Navisworks Manage**
- **Using Clash Detection on large data sets effectively**
- **Viewing tools**
  - Walk/Fly
  - Gravity